

FEATURES

- Compact pilot boxes with direct operated, integrated pilot valves
- Especially designed for the remote control of pulse valves (series 353)
- Valve seats are integrated in base plate
- Common exhaust connection for just 1 or 2 (G 3/8") silencers
- Built-in heating elements for trouble free operation at low ambient temperatures
- Degree of protection: IP 65
- Facilities for integrated quick fittings
- The components satisfy all relevant EC directives

GENERAL

Differential pressure (PS) 0 to 8,5 bar [1 bar = 100kPa]
Response times 5 - 25 ms

fluid	temperature range (TS)	seal material
air	-20 to +80°C	NBR (nitrile)

CONSTRUCTION

Base-plate Anodised aluminium
Cover ABS (polystyrene) UV stabilized
Core tube Brass
Core and plugnut Stainless steel
Spring Stainless steel
Disc NBR (nitrile)
Shading coil Copper
Coil insulation class F
Electrical connection Spades according to DIN 46244

ELECTRICAL CHARACTERISTICS

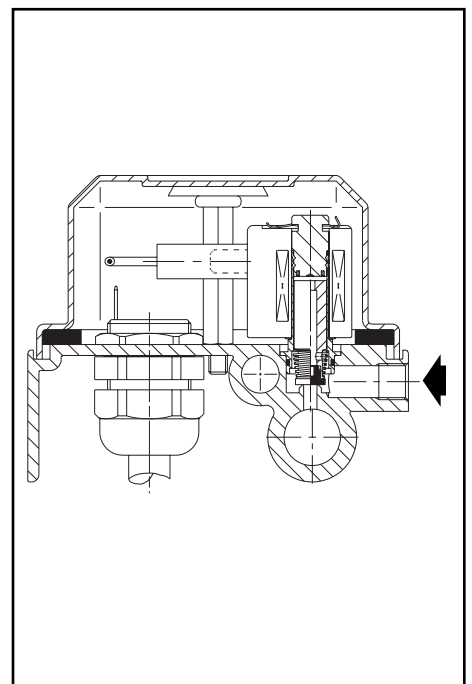
Standard voltages DC (=) 24V
AC (~) 24V - 115V - 230V/50Hz

coil type	nominal power ratings				ambient temperature range (2) (°C)	protection
	inrush	holding		cold		
	~ (VA)	~ (VA)	(W)	= (W)		
UCM22-FI (1)	20,4	14	10	22	-40 to +85	moulded

SPECIFICATIONS

number of pilot valves	pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)		catalogue number for the boxes (2)		
					min.	maximum (PS)	without heating	1 heating element (3)	2 heating elements (3)
G	(mm)	(m³/h)	(l/min)		~/=				
2	1/8	3,6	0,35	5,8	0	8,5	S G110A020	S G110A021	-
3							S G110A030	S G110A031	-
4							S G110A040	S G110A041	-
5							S G110A050	S G110A051	-
6							S G110A060	S G110A061	-
7							1/8	3,6	0,35
8	S G110A080	S G110A081	S G110A082						
9	S G110A090	S G110A091	S G110A092						
10	S G110A100	S G110A101	S G110A102						
11	S G110A110	S G110A111	S G110A112						
12	S G110A120	S G110A121	S G110A122						

- (1) Intermittent duty, Relative Duty Time is 10%. Max on time is 1 min.
(2) Minimum ambient temperature without heating elements : 0°C
Minimum ambient temperature with 1 heating element : -40°C (2 to 6 pilots)
: -15°C (7 to 12 pilots)
Minimum ambient temperature with 2 heating elements : -40°C (7 to 12 pilots)
(3) Heating element(s) 220-240 VDC / VAC 50-60 Hz standard, for other voltages see ordering information.
Heating element(s) rating 80 watt each.



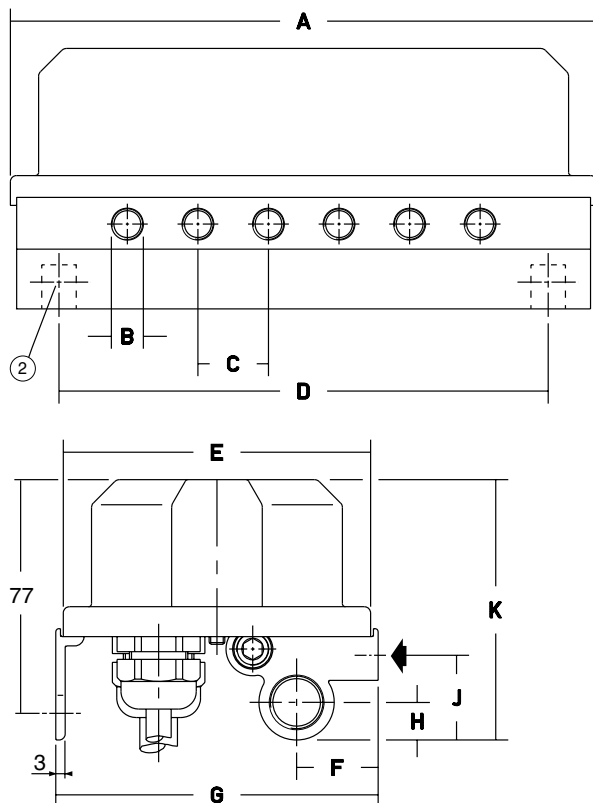
OPTIONS

- Pilot boxes with metal cover for harsh conditions and dust approved to ATEX heavy duty applications (prefix: **WP**)
- Integrated quick fittings for 6 or 8 mm tubes
- Special customer adapted executions

INSTALLATION

- The pilot boxes can be mounted in any position without affecting operation
- Pipe connections are: G 1/8 according to ISO 228 for pilot connection
G 3/8 according to ISO 228 for common exhaust
- Cable entries: control cable on box with 2 - 6 pilot valves : cable Ø 10 - 14 mm
control cable on box with 7 - 12 pilot valves : cable Ø 13 - 18 mm
connection cable heating element : cable Ø 5 - 10 mm
- Installation/maintenance instructions are included with each pilot box
- Spare parts kit and replacement coils are available

DIMENSIONS (mm), WEIGHT (kg)



ORDERING INFORMATION

(WP) S G110 A 12 0 230/50

Volts/ Hz

Optional execution

- 0 = no heating element
- 1 = 1 heating element 230V/50Hz
- 2 = 2 heating elements 230V/50Hz
- 3 = 1 heating element 24V DC
- 4 = 2 heating elements 24V DC
- 5 = 1 heating element 115V/50Hz
- 6 = 2 heating elements 115V/50Hz

Number of pilots

- 02 = 2 pilot valves
- 03 = 3 pilot valves etc. (max. 12)

Change letter

Basic number

- G110 = threaded ports
- G120 = 6 mm quick fitting + TPL 22467
- G130 = 8 mm quick fitting + TPL 22386

Electrical connection
spade terminals 6,3 x 0,8

Prefix (optional)

WP: Waterproof IP 65
metal enclosure and cover

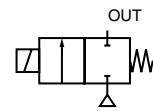
number of pilot valves	A	B	C	D	E	F	G	H	J	K	weight (1)
2 to 6	187	G 1/8	22,5	156	98	26	103	12	27	83	1
7 to 12	322	G 1/8	22,5	266	98	26	103	12	27	83	2,2

(1) incl. coil and connector

(2) mounting: 2 holes Ø10 with pitch D

Au

X003-30



FEATURES

- Pilot box intended for use in potentially explosive dusty atmospheres, according to Directive ATEX 94/9/EC
- Compliance with the Essential Health and Safety Requirements has been assured by European Standards EN 50014, EN 50281-1-1 and EN 13463-1
- Containing 2 to 12 valves, 2/2 normally closed, direct operated
- Common exhaust connection for 1 or 2 (G 3/8") silencers
- Degree of protection: IP65
- Facilities for integrated quick fittings
- The components satisfy all relevant EC directives

GENERAL

Differential pressure (PS) 0 to 8,5 bar [1 bar = 100kPa]
Response times 5 - 25 ms

fluid	temperature range (TS)	seal material
air	-20 to +80°C	NBR (nitrile)

CONSTRUCTION

Base-plate	Anodised aluminium
Cover	Aluminium
Core tube	Brass
Core and plugnut	Stainless steel
Spring	Stainless steel
Disc	NBR (nitrile)
Shading coil	Copper
Coil insulation class	F
Electrical connection	Spades according to DIN 46244

ELECTRICAL CHARACTERISTICS

Standard voltages DC (=) 24V; AC (~) 24V - 115V - 230V/50Hz

coil type	nominal power ratings				ambient temperature range (2) (°C)	protection
	inrush	holding		cold		
	~ (VA)	~ (VA)	~ (W)	= (W)		
UCM22-FI (1)	20,4	14	10	22	-40 to +75	moulded

TEMPERATURE CLASSIFICATION TABLES

AC (~) Solenoids

power level (watt)	isolation class	maximum ambient °C surface temperature		
		85°C	100°C	135°C
		10,0	F	40°C

DC (=) Solenoids

power level (watt)	isolation class	maximum ambient °C surface temperature		
		85°C	100°C	135°C
		22,0	F	40°C

SPECIFICATIONS

number of pilot valves	pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)		catalogue number for ATEX approved boxes (2)		
					min.	maximum (PS)	without heating	1 heating element (3)	2 heating elements (3)
2	1/8	3,6	0,35	5,8	0	8,5	WPSDU G110A020	WPSDU G110A021	-
3							WPSDU G110A030	WPSDU G110A031	-
4							WPSDU G110A040	WPSDU G110A041	-
5							WPSDU G110A050	WPSDU G110A051	-
6							WPSDU G110A060	WPSDU G110A061	-
7							1/8	3,6	0,35
8	WPSDU G110A080	WPSDU G110A081	WPSDU G110A082						
9	WPSDU G110A090	WPSDU G110A091	WPSDU G110A092						
10	WPSDU G110A100	WPSDU G110A101	WPSDU G110A102						
11	WPSDU G110A110	WPSDU G110A111	WPSDU G110A112						
12	WPSDU G110A120	WPSDU G110A121	WPSDU G110A122						

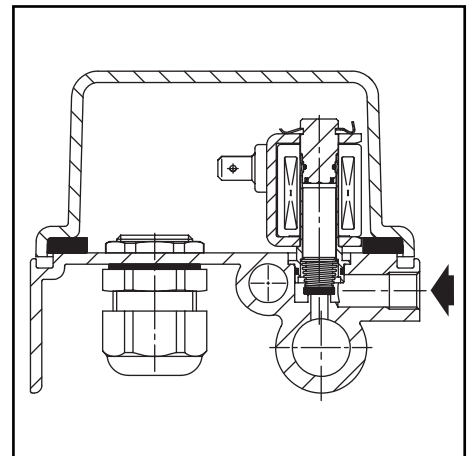
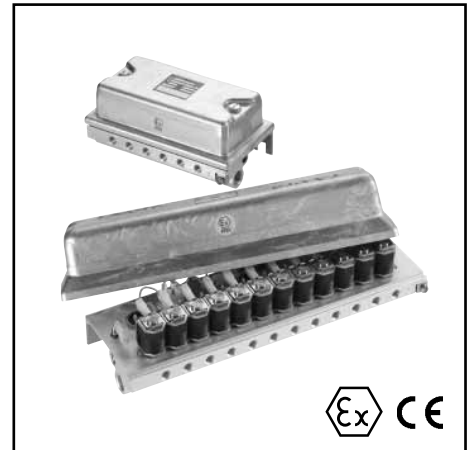
(1) Intermittent duty, Relative Duty Time is 10%. Max on time is 1 min.

(3) Heating element(s) 220-240 VDC / VAC 50-60 Hz standard, for other voltages see ordering information. Heating element(s) rating 80 watt each.

(2) Minimum ambient temperature without heating elements: 0°C

Minimum ambient temperature with 1 heating element : -40°C (2 to 6 pilots)
: -15°C (7 to 12 pilots)

Minimum ambient temperature with 2 heating elements : -40°C (7 to 12 pilots)



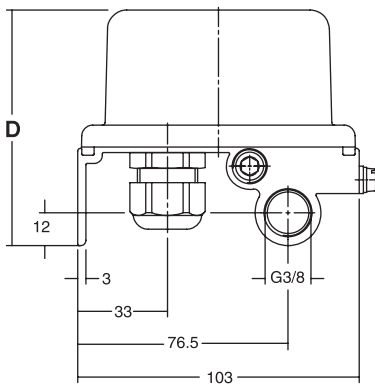
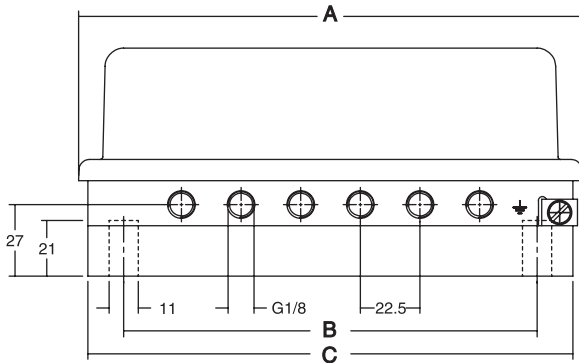
OPTIONS

- Integrated quick fittings for 6 or 8 mm tubes
- Special customer adapted executions

INSTALLATION

- The pilot boxes can be mounted in any position without affecting operation
- Pipe connections are: G 1/8 according to ISO 228 for pilot connection
G 3/8 according to ISO 228 for common exhaust
- Cable entries: control cable on box with 2 - 6 pilot valves : cable Ø 7 - 12 mm
control cable on box with 7 - 12 pilot valves : cable Ø 9 - 16 mm
connection cable heating element : cable Ø 5 - 10 mm
- Installation/maintenance instructions are included with each pilot box
- Spare parts kit and replacement coils are available

DIMENSIONS (mm), WEIGHT (kg)



ORDERING INFORMATION

WP S DU G110 A 12 0 230/50

Volts/ Hz

Optional execution

- 0 = no heating element
- 1 = 1 heating element 230V/50Hz
- 2 = 2 heating elements 230V/50Hz
- 3 = 1 heating element 24V DC
- 4 = 2 heating elements 24V DC
- 5 = 1 heating element 115V/50Hz
- 6 = 2 heating elements 115V/50Hz

Number of pilots

- 02 = 2 pilot valves
- 03 = 3 pilot valves etc. (max. 12)

Change letter

Basic number

- G110 = threaded ports
- G120 = 6 mm quick fitting + TPL 22467
- G130 = 8 mm quick fitting + TPL 22386

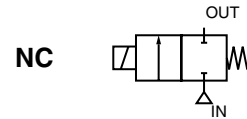
Approval according to
Directive ATEX 94/9/EC

Electrical connection
spade terminals 6,3 x 0,8

Prefix (optional)

WP: Waterproof IP 65
metal enclosure and cover

number of pilot valves	A	B	C	D
2 to 6	190	156	183	86
7 to 12	328	266	318	95



FEATURES

- Compact pilot boxes with direct operated, integrated pilot valves
- Especially designed for the remote control of pulse valves (series 353)
- Pilot valves are assembled in base plate
- Heating element for trouble free operation at low ambient temperatures
- Class of protection: IP 65
- The components satisfy all relevant EC directives

GENERAL

Differential pressure (PS) 0 - 7 bar [1 bar = 100kPa]
Response times 5 - 25 ms

fluid	temperature range (TS)	diaphragms
air	-20 to +80°C	NBR (nitrile)



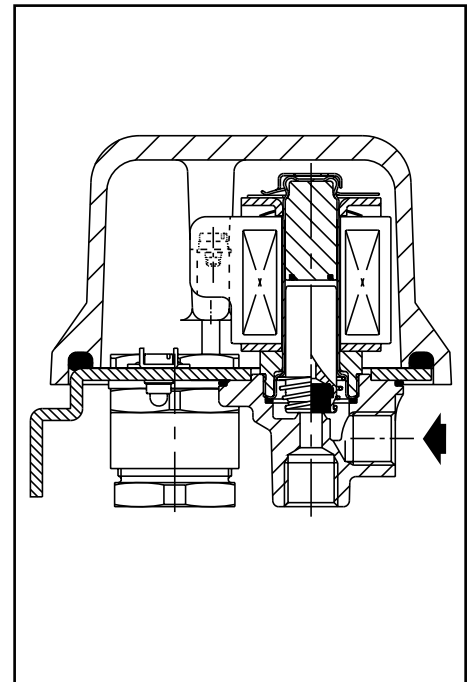
CONSTRUCTION

Base-plate	Steel (zinc plated)
Cover	Cast-aluminium
Core tube	Stainless steel
Core and plugnut	Stainless steel
Spring	Stainless steel
Disc	NBR (nitrile)
Pilot body	Brass
Shading coil	Copper
Coil insulation class	F
Electrical connection	Coil with screw terminal

ELECTRICAL CHARACTERISTICS

Standard voltages DC (~) 24V
AC (=) 24V - 115V - 230V/50Hz

coil type	nominal power ratings				ambient temperature range (2) (°C)	protection
	inrush	holding		cold		
	~ (VA)	~ (VA)	(W)	= (W)		
SMXX-FB	56	35	16,7	-	-15 to +85	moulded
SMXX-FI (1)	-	-	-	30	-15 to +85	moulded



SPECIFICATIONS

number of pilot valves	pipe size	orifice size	flow coefficient kv		operating pressure differential (bar)		catalogue number for boxes (2)	
					min.	maximum (PS)	without heating	with 1 heating element (3)
4	Rp	(mm)	(m³/h)	(l/min)	0	7	C204-220	C204-221
5	1/4	5,6	0,71	11,8			C205-220	C205-221
6							C206-220	C206-221

(1) Intermittent duty, Relative Duty Time is 10%. Max on time 1 min.

(2) Without heating elements: minimum ambient temperature 0°C; with one heating element: -15°C

(3) Heating element: refer to "Ordering Information". Heating element rating: 80 watt.

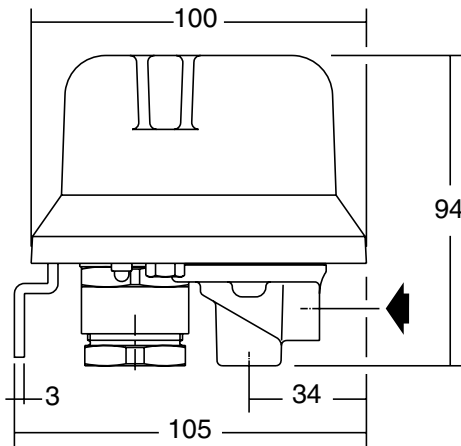
OPTIONS

- Heating element for low ambient temperatures
- Special customer adapted executions on request

INSTALLATION

- The pilot boxes can be mounted in any position without affecting operation
- Pipe connections are: Rp 1/4 according to ISO 7/1 for pilot connection
- Cable entries: control cable on box : cable Ø 13 - 18 mm
connection cable heating element : cable Ø 6 - 12 mm
- Spare parts kit and replacement coils are available

DIMENSIONS (mm), WEIGHT (kg)



ORDERING INFORMATION

C20 6 - 2 2 0 230/50

Volts / Hz

Optional execution

0 = no heating element
1 = element with same voltage as coils. If coil voltage deviates from heating element voltage, please consult us for exact codification

Pipe size Rp 1/4

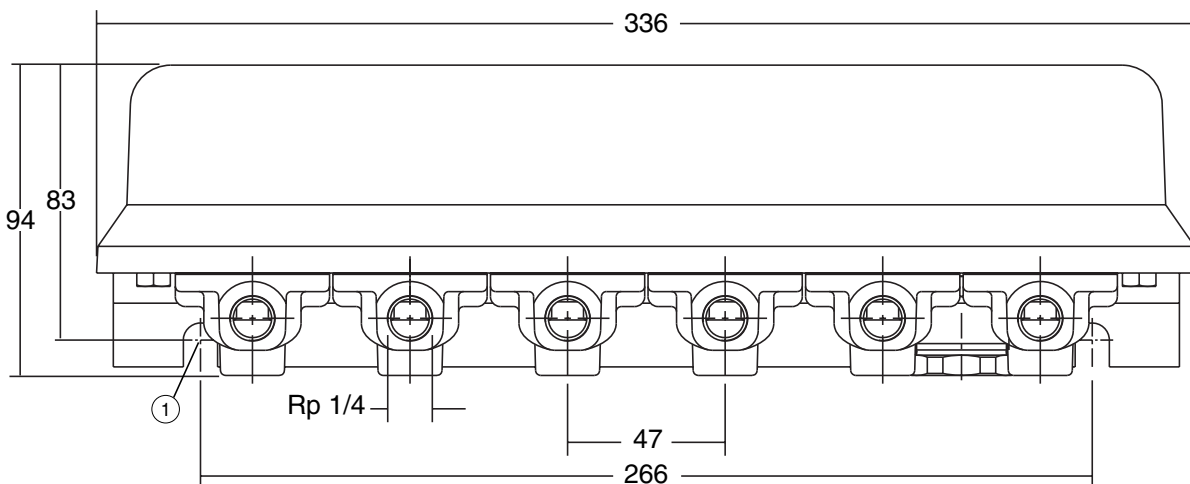
Coil type only SMXX

Change letter

Number of pilots

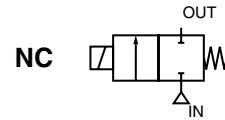
4 = 4 pilot valves
5 = 5 pilot valves
6 = 6 pilot valves

Basic number C20



① Mounting : 2 holes Ø 10 with pitch D

pipe connections	weight
C204	3,7
C205 Rp 1/4	4,1
C206	4,6



FEATURES

- Pilot box intended for use in potentially explosive dusty atmospheres, according to Directive ATEX 94/9/EC
- Compliance with the Essential Health and Safety Requirements has been assured by European Standards EN 50014, EN 50281-1-1 and EN 13463-1
- Containing 4 to 6 valves, 2/2 normally closed, direct operated
- Pilot valves are assembled in base plate
- Heating element for trouble free operation at low ambient temperatures
- Class of protection: IP65
- The components satisfy all relevant EC directives

GENERAL

Differential pressure (PS) 0 - 7 bar [1 bar = 100kPa]

Response times 5 - 25 ms

fluid	temperature range (TS)	seal material
air	-20 to +80°C	NBR (nitrile)

CONSTRUCTION

Base-plate	Steel (zinc plated)
Cover	Aluminium
Core tube	Stainless steel
Core and plugnut	Stainless steel
Spring	Stainless steel
Disc	NBR (nitrile)
Pilot body	Brass
Shading coil	Copper
Coil insulation class	F
Electrical connection	Coil with screw terminal

ELECTRICAL CHARACTERISTICS

Standard voltages DC (~) 24V
AC (=) 24V - 115V - 230V/50Hz

coil type	nominal power ratings				ambient temperature range (2) (°C)	protection
	inrush ~ (VA)	holding ~ (VA)	cold = (W)	holding = (W)		
SMXX-FB	56	35	16,7	-	-15 to +75	moulded
SMXX-FI (1)	-	-	-	30	-15 to +75	moulded

TEMPERATURE CLASSIFICATION TABLES

AC (~) Solenoids

power level (watt)	isolation class	maximum ambient °C surface temperature		
		85°C	100°C	135°C
16,7	F	40°C	60°C	75°C

DC (=) Solenoids

power level (watt)	isolation class	maximum ambient °C surface temperature		
		85°C	100°C	135°C
30,0	F	40°C	60°C	75°C

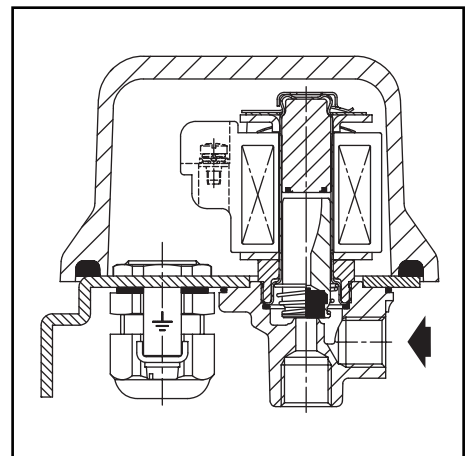
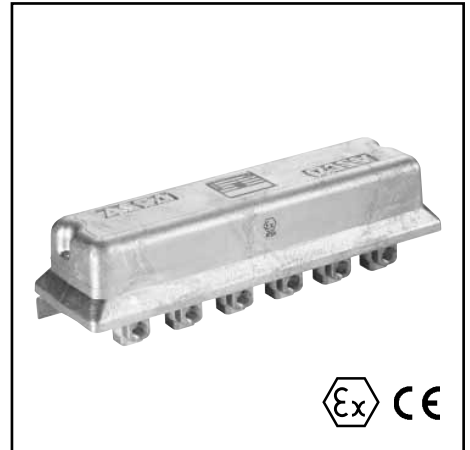
SPECIFICATIONS

number of pilot valves	pipe size	orifice size (mm)	flow coefficient kv (m³/h) (l/min)		operating pressure differential (bar)		catalogue number for ATEX approved boxes (2)	
					min.	maximum (PS)	without heating	with 1 heating element (3)
						air ~/=		
4	1/4	5,6	0,71	11,8	0	7	DU C204-220	DU C204-221
5							DU C205-220	DU C205-221
6							DU C206-220	DU C206-221

(1) Intermittent duty, Relative Duty Time is 10%. Max on time 1 min.

(2) Without heating elements: minimum ambient temperature 0°C; with one heating element: -15°C

(3) Heating element: refer to "Ordering Information". Heating element rating: 80 watt.



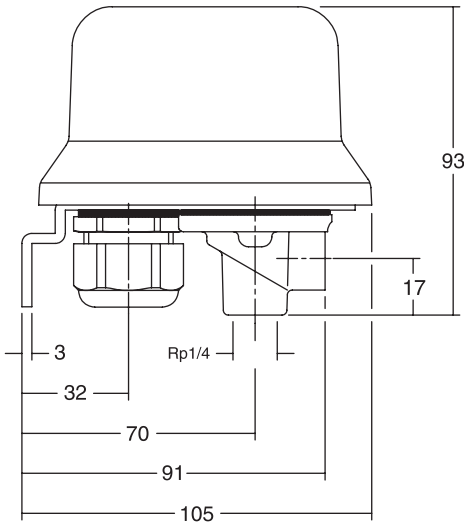
OPTIONS

- Heating element for low ambient temperatures -40°C
- Special customer adapted executions on request

INSTALLATION

- The pilot boxes can be mounted in any position without affecting operation
- Pipe connections are: Rp 1/4 according to ISO 7/1 for pilot connection
- Cable entries: control cable on box : cable Ø 9 - 16 mm
connection cable heating element : cable Ø 7 - 12 mm
- Spare parts kit and replacement coils are available

DIMENSIONS (mm), WEIGHT (kg)



ORDERING INFORMATION

DU C20 6 - 2 2 0 230/50

Volts / Hz

Optional execution

0 = no heating element
1 = element with same voltage as coils. If coil voltage deviates from heating element voltage, please consult us for exact codification

Pipe size Rp 1/4

Coil type only SMXX

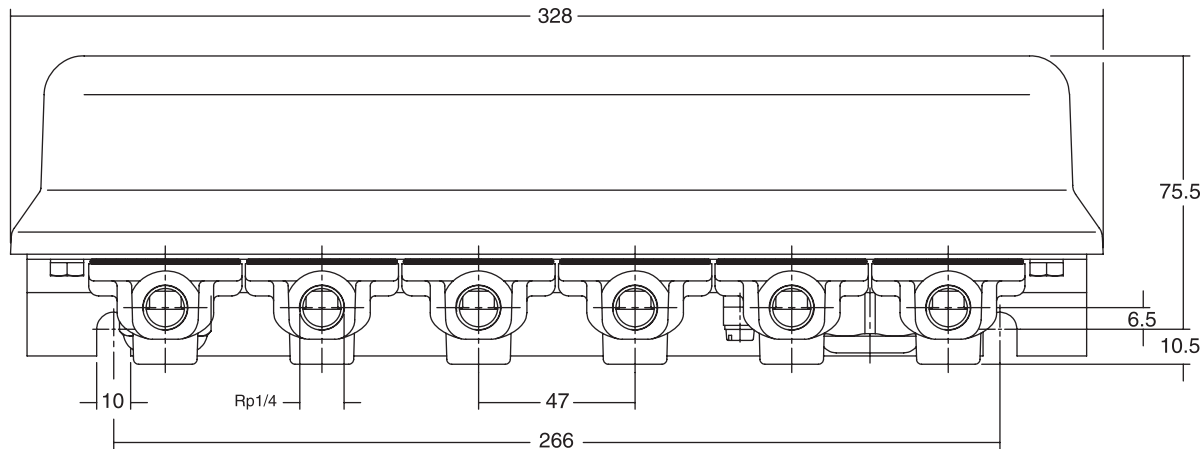
Change letter

Number of pilots

4 = 4 pilot valves
5 = 5 pilot valves
6 = 6 pilot valves

Basic number C20

Approval according to Directive ATEX 94/9/EC



pipe connections	weight
C204	3,7
C205 Rp 1/4	4,1
C206	4,6